1.0 Purpose of and Need for Action

This environmental assessment (EA) analyzes public land resource issues within the Petrolia Watershed and is part of a field office-wide planning effort.

The EA defines the issues, details the alternatives considered, describes the biological and physical characteristics of the affected environment, and explains the environmental consequences of each alternative.

The information in this chapter is organized into the following headings:

- 1.1 Background
- 1.2 Location
- 1.3 Decision Needed
- 1.4 Direction from and Conformance with Land Use Plans
- 1.5 Issues and Objectives Specific to the Petrolia Watershed
- 1.5.1 Upland Health
- 1.5.2 Riparian Health
- 1.5.3 Water Quality
- 1.5.4 Biodiversity
- 1.5.5 Noxious Weeds
- 1.6 Issues Considered but not Addressed
- 1.7 Issue Objectives Summary

1.1 Background

The Bureau of Land Management (BLM), Lewistown Field Office (LFO), has undertaken a field office-wide planning effort, focused on implementing decisions in the Judith-Valley-Phillips-Resource Management Plan (JVP RMP) (1994). The LFO administers 850,000 acres of public land in nine central Montana counties; an area approximately 225 miles long by 150 miles wide. The vastness of this jurisdictional area, combined with direction from the JVP RMP has prompted the LFO to delineate smaller, manageable planning

units based on watersheds. Planning has been completed on eight of the 23 watersheds identified within the LFO; the Petrolia Watershed is the ninth plan.

1.2 Location

The Petrolia Watershed is located in Fergus and Petroleum Counties, Montana. It encompasses an area between the Judith and Little Snowy Mountains and the Musselshell River including Ford's Creek, Boxelder Creek, Little Boxelder Creek, Pike Creek, lower Flatwillow Creek, and the Musselshell River between the Mosby bridge and the Musselshell County line (see Map M1).

The watershed planning area contains approximately 805,320 acres, including 150,621 acres of land administered by the BLM (public land), 51,660 acres of State land, 3,080 acres administered by the U.S. Fish & Wildlife Service and 599,959 acres of private land. A total of 134 BLM grazing allotments are permitted to 76 permittees. (Maps M1 and M2 & Appendix K).

1.3 Decision Needed

The LFO manager is the responsible official who must decide whether to implement decisions proposed in the preferred alternative. These decisions would include:

- Renewing grazing permits based on determinations of rangeland health standards and livestock grazing guidelines.
- Initiating and sustaining cooperative noxious weed control efforts.

1.4 Direction From and Conformance With Land Use Plans

The JVP RMP specifies land use plan decisions and objectives to be implemented in the Petrolia Watershed. It also specifies

that implementation of riparian/wetland decisions will be conducted on a watershed basis and will consider management of streams, water sources and uplands.

The watersheds administered by the LFO were prioritized for implementation of land use plan decisions based on multiple use criteria. The BLM is also required to complete an environmental analysis when renewing 10-year grazing permits. This watershed analysis will review the allotments in the Petrolia Watershed for compliance with the standards for rangeland health (Appendix B). Existing permits would be cancelled and new 10-year grazing permits would be offered at the conclusion of this effort.

The JVP RMP was amended by the Standards for Rangeland Health and Guidelines for Livestock Grazing Management Environmental Impact Statement (USDI, BLM, 1997). Specific standards and guidelines were then developed for the Lewistown District with the benefit of public participation and conveyed as recommendations to the BLM by the Central Montana Resource Advisory Council (RAC). (Appendices A and B).

The JVP RMP has also been amended by the Fire Management Plan/Plan Amendment for Montana and the Dakotas. The amendments replace or include language to bring these plans up to date with the Federal Wildland Fire Management Policy.

The JVP RMP set forth the land use decisions and conditions guiding management of public land and minerals within the Petrolia Watershed. All uses and activities within the area must conform with the decisions, terms and conditions described in this plan. Appendix L describes the land use plan guidance contained in the JVP RMP that is pertinent to this watershed.

1.5 Issues and Objectives Specific to the Petrolia Watershed

1.5.1 Upland Health

<u>Issue</u>: The upland health standard recommended by the RAC is not being met for some of the upland areas on public lands. Livestock are a significant factor in some cases.

Short-term objective: Maintain the 81 allotments that are meeting the upland standard, maintain or improve the 16 allotments that are not meeting the upland standard (not livestock caused), and take actions that would ensure significant progress is made toward meeting the standard on the 37 allotments that are not meeting the standard due to current livestock management. Also, enter into cooperative weed control agreements (or re-emphasize current cooperative agreements) with permittees where uplands are not meeting the health standard due to noxious weed infestations.

Long-term objective: Maintain or improve upland areas so that all allotments are meeting the upland health standard or making significant progress within 10 years where current livestock management is a significant factor affecting upland health.

1.5.2 Riparian Health

<u>Issue</u>: The riparian area standard recommended by the RAC is not being met for some of the riparian areas on public lands. Current livestock management is a significant factor in some cases.

Short-term objective: Maintain the 21.4 miles of riparian areas that are in Proper Functioning Condition (PFC) or are making significant progress toward PFC. Where stream function is degraded because of current livestock management or noxious weeds, make significant progress toward

achieving PFC on the 12.2 miles of riparian areas in functioning-at-risk (FAR) condition and the 20.4 miles of non-functioning (NF) riparian areas during the next grazing season. Also, enter into cooperative weed control agreements (or re-emphasize current cooperative agreements) with permittees where streams are not meeting the riparian standard due to noxious weed infestations.

Long-term objective: Maintain or improve all riparian areas to PFC within 10 years where current livestock management is a significant factor affecting riparian health.

1.5.3 Water Quality

<u>Issue</u>: The water quality standard recommended by the RAC is not being met on rivers and streams in two allotments. Livestock are a significant factor in one case.

Short-term objective: Maintain the 26 allotments that are meeting the water quality standard, maintain or improve the allotment that is not meeting the water quality standard (not livestock caused), and take actions that would ensure significant progress is made toward meeting the standard on the allotment not meeting the standard due to current livestock management.

Long-term objective: Maintain or improve rangeland health so that all allotments are meeting the water quality standard or making significant progress within 10 years where current livestock management is a significant factor affecting water quality.

1.5.4 Biodiversity

<u>Issue</u>: The biodiversity health standard recommended by the RAC is not being met on some allotments. Livestock are a significant factor in some cases.

Short-term objective: Maintain the 86 allotments that are meeting the biodiversity standard, maintain or improve the 17 allotments that are not meeting the biodiversity standard (not livestock caused), and take actions that would ensure significant progress is made toward meeting the standard on the 31 allotments that are not meeting the standard due to current livestock management.

Long-term objective: Maintain or improve rangeland health so that all allotments are meeting the biodiversity standard or making significant progress within 10 years where current livestock management is a significant factor affecting biodiversity.

<u>Issue</u>: Residual understory vegetation is not adequate to meet the needs of nesting upland game bird (sage grouse) habitat in some allotments.

<u>Objective</u>: Maintain and/or enhance known upland game bird habitat (sage grouse).

1.5.5 Noxious Weeds

<u>Issue</u>: Noxious weed populations are present on public, private, and state lands within the watershed.

Objective: Continue control of known noxious weed infestations and all newly identified infestations. Initiate new cooperative weed control agreements with grazing permittees within the watershed and re-emphasize current agreements. Eradicate any new populations of category 3 weeds (See Appendix J for a description of weed categories).

1.6 Issues Considered But Not Addressed In This Plan

The following issues were considered but determined not relevant for the purposes of this analysis.

- recreation
- access
- lands (exchanges and purchases)
- mining
- oil and gas field development

1.7 Issue Objectives Summary

Table 1.1 Summary of Issue Objectives for Alternatives 1 and 2, Described in Chapter 2

Alternatives 1 and 2, Described in Chapter 2		
	Alternative 1	Alternative 2
Upland Health	allotments would not meet objectives due to livestock grazing.	All allotments would meet upland objectives
Riparian Health	allotments would not meet objectives due to livestock grazing.	All allotments would meet riparian objectives
Water Quality	1 allotment would not meet objectives due to livestock grazing.	All allotments would meet water quality objectives.
Biodiversity	31 allotments would not meet objectives due to livestock grazing.	All allotments would meet biodiversity objectives.
Noxious Weeds	The weed objective would be minimally met.	The weed objective would be met.